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## Clearinghouse of a patient literature

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## Clearinghouse of a patient literature

### Abstract

Although Pacific University College of Optometry has a tremendous amount of resources in terms of written, patient literature, it has not been put to use very effectively. There was a lack of an adequate system for inventory, organization, and distribution of these resources. Given this, the goal of our thesis project was to clearly define the problem within our clinic and organize the patient literature system in a coherent manner and promote their use in patient care. This thesis also investigates several new ways to make patient literature system at PUCO more efficient and effective, and suggests areas of future research in this topic. An inventory of brochures was taken and needed brochures were ordered according to the results of the faculty survey. Brochures were organized and displayed in convenient areas throughout the clinic. Then interns were made aware of these changes and were encouraged to utilize them in patient care. These changes were found to be effective and helpful in patient care in PUCO.

### Degree Type

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### Degree Name

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### Committee Chair

Robert Rosenow

### Subject Categories

Optometry

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**CLEARINGHOUSE OF PATIENT LITERATURE**

BY

DANA M. MCDERMOTT

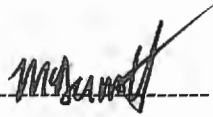
AND

EMILY E. NAM

A thesis submitted to the faculty of the  
College of Optometry  
Pacific University  
Forest Grove, Oregon  
for the degree of  
Doctor of Optometry  
December, 1998

Advisor:  
Robert Rosenow, Pharm. D, O.D.

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## **BIBLIOGRAPHY**

Dana McDermott was born in Thermopolis, Wyoming. She attended Chadron State College in Nebraska where she earned a bachelor of arts degree with a major in psychology, Magna Cum Laude, before entering optometry school.

Emily Nam was born in Seoul, Korea. She attended Pacific University where she earned a bachelor of science degree in philosophy, Magna Cum Laude, before entering optometry school.

## ABSTRACT

Although Pacific University College of Optometry has a tremendous amount of resources in terms of written, patient literature, it has not been put to use very effectively. There was a lack of an adequate system for inventory, organization, and distribution of these resources. Given this, the goal of our thesis project was to clearly define the problem within our clinic and organize the patient literature system in a coherent manner and promote their use in patient care. This thesis also investigates several new ways to make patient literature system at PUCO more efficient and effective, and suggests areas of future research in this topic.

An inventory of brochures was taken and needed brochures were ordered according to the results of the faculty survey. Brochures were organized and displayed in convenient areas throughout the clinic. Then interns were made aware of these changes and were encouraged to utilize them in patient care. These changes were found to be effective and helpful in patient care in PUCO.

## ACKNOWLEDGEMENTS

We like to thank a few people who helped us tremendously in our thesis project. Dr. Robert Rosenow served as our thesis advisor and he was not only helpful in guiding us through this ordeal, but also extremely gracious in giving us the autonomy to take this project into the direction we wanted to take. He really helped us make our project effective and enjoyable.

We also like to thank the front office staff for all their help. They were not only very cooperative, but also very patient with us during this whole process.

Lastly, we would like to thank Mike Rushfeld for actually installing the brochure boards.



## INTRODUCTION

Patient education is one of the most important aspects of clinical practice. Making the proper diagnosis and treatment plan is very important in patient care, but equally important is the ability of the clinician to effectively communicate and educate the patient. Oral communication is one important element of patient communication, but written literature such as patient brochure is another element that not only cements the verbal interaction, but also guides the clinician in educating the patient.

When a clinician discusses the diagnosis, the prognosis and the treatment plan, sometimes it is not only difficult for the patient to understand all the technical jargon, but often, the patient does not remember all that has been said to him or her in the exam room. Furthermore, with the progression of managed care and push for efficiency, the clinician simply does not have time to sit down with a patient and have a detailed, comprehensive discussion about the patient's condition. Therefore, the use of patient literature becomes not only important for proper patient education, but also very necessary in terms of time management in the clinic.

Although Pacific University College of Optometry has a tremendous amount of resources in terms of written, patient literature, it has not been put to use very effectively. First of all, organization of the brochures was inadequate and many of the interns and staff did not know where or what was available. The brochures were located in a very inconvenient spot, and were not organized in such a way that an intern could quickly find the proper one for a patient. Furthermore, some of the brochures were outdated and were no longer effective. Content aside, some of the major areas of eye health were underrepresented in the mountains of unorganized and incoherent stacks of papers. And, there was no method in place to maintain the inventory. In short, the biggest problem we found was that although the clinic had enough raw resources, in terms of patient literature, it was not being utilized efficiently or effectively.

Given this, the goal of our thesis project was to clearly define the problem with the patient literature system at Pacific, organize the system in a coherent manner and promote the use of patient literature within the clinic to

improve patient care. Therefore, the steps we followed to accomplish our goals were:

- 1) Understand and define the pre-existing problem with the patient literature system at PUCO
- 2) Take a complete inventory of what brochures were currently available.
- 3) Define what kinds of brochures were needed and used the most in the clinics and order those still needed for patient care.
- 4) organize the brochure system and locate them in strategic places in the clinic
- 5) make the staff and the interns aware of these changes and promote their use.
- 6) Check the effectiveness of these changes by sending out questionnaires to the interns.

## METHODS

### 1) Patient brochure inventory:/ organization

We first took a complete inventory of all the brochures that were available in the clinic. We found that they were not housed in one single place, but were sporadically stored in inconvenient locations. However, most of them were stacked in the wall cabinets behind the front desk. They were randomly placed there without any apparent system of organization. Therefore, we first grouped them together into different categories and made a master list of all the brochures we had. The categories established were:

- 1)refractive conditions
- 2)disease
- 3)contact lens
- 4)strabismus and amblyopia
- 5)vision therapy
- 6)sports vision
- 7)occupational vision/environmental vision
- 8)Low vision/geriatrics
- 9) school/reading/pediatrics/screening material
- 10)Spanish literature

After we organized all the brochures in these categories, we eliminated those that were too outdated and also those with poor content. Then we sent out a complete list of all the current brochures to the clinic staff and asked them to note those they felt were most useful in clinic. We also asked them to make suggestions, or comments, on what they thought we needed to make this work more effectively. After compiling the results, we ordered those topics that were deficient in the original inventory.

We also made two-layer, blank tear-off sheets for writing down treatment regiment or any other pertinent information for the patient to take home. We made these two layers so that one copy can go with the patient, and the other can remain in the patient file for our records.

### 2) Putting up the brochure boards

One of our goals was to make brochures easily accessible to the interns. To facilitate this we installed several brochure boards in strategic places in the clinic. We first had to order the racks to hold the brochures, then we put

them up in 3 different locations: 1. the front reception area. 2. near the intern lounge area. 3. near the VT / pediatrics clinic. For the board near the intern lounge, we included the refractive error brochures and the disease brochures. For the board in the front lobby, we included more general clinic brochures explaining our institution and services. And we also included some common brochures pertaining to general vision and eye health. For the board near VT/Pediatrics, we selected some VT, strabismus, occupational, and environmental brochures pertaining to functional vision.

### 3) Making the staff and interns aware of the changes and promoting their use

Once we organized all the patient literature and displayed them in brochure boards, we informed interns of the changes we made. We also impressed upon them that since they are now readily available, we should try to use them more in patient care.

### 4) Check the effectiveness of these changes

After giving the interns about a month to use the new system, we sent out a survey asking them various questions about the new system versus the old system. We asked the interns to fill out the questionnaire and send it back to us to see if there was any benefit in revamping the old brochure system.

## RESULTS/DISCUSSION

Making the patient literature system more efficient was one of our main goals. Sorting through the old literature and eliminating outdated information was a critical first step. It is imperative that the information that the clinician provides is current and accurate, whether the medium is written or verbal.

The results of our initial survey to the attending doctors gave us a good indication as to what materials were needed for patient care in the clinic. Eleven surveys were returned with various comments and responses. Overall, what the staff wanted the most were disease and Spanish brochures. Out of all the surveys returned 75% requested disease brochures and 45% requested Spanish literature. Furthermore, they supported and encouraged our plans for patient tear-off sheets and proper display of these materials throughout the clinic. In response to these feedbacks, we organized the already existing brochures in a coherent manner, ordered those that were specifically requested, and made three separate displays throughout the clinic for efficient and easy access.

Once all of the appropriate materials have been obtained, they need to be displayed in an orderly fashion. This ensures that the topic that is needed can be quickly located. We labeled the outside of each display section with the topic that was contained within. This is especially helpful when a non-Spanish speaking intern is gathering literature for a Spanish speaking patient. The labels also help to maintain the system in an orderly fashion. In the old system there was no method in place to find out what brochures were needed for restocking or reordering.

We allowed information to be more easily distributed by providing new displays and moving old ones to more convenient locations. When an intern is running short on time it is easier for him to pick-up a brochure just outside the exam lane or on the way to talk to the attending doctor. When the brochures were not located near the exam lanes it took longer to access the information. The saying "out of sight out of mind" also helps to explain why the new system seems to be more effective. Interns may be reminded that literature is available when they are walking past a display to escort the patient out at the end of the exam. When the literature was not located near the exam lanes the interns had to walk around people in the waiting room, to

find a brochure for a patient. That patient may also not appreciate others in the waiting area seeing which topics the doctor is choosing for them. However, separate displays were added to the reception area allowing patients to browse over general topics and information about our services at their leisure.

In the patient reception area, where patients may have more time to browse through the available literature ,we took a slightly different approach. First, we put the labels on the inside of the display rack. This way the labels could still be used for restocking and arranging, but were not visible to the patient, and were not providing an unappealing appearance. The content of the information was also different. In this area we housed less of the brochures pertaining to specific disease conditions and used those of more general topics. Brochures dealing with conditions of the eye including general disease, aging, refractive errors, general vision therapy, binocular vision , and information about certain occupational lenses were also included.

Brochures dealing with certain disease topics were added to the brochures near the exam lanes to cover common areas of patient care. It is especially helpful to be able to provide patients with some written information to help clarify the situation. Many times, even when a patient appears to understand everything during the exam, later on they may forget much of the information. It is much easier for the patient to remember and explain what is going on to family when they have some written information to help refresh and clarify what was said in the office.

Explaining conditions to patients is challenging in any situation, but when there is a language barrier it becomes more difficult. The new series of Spanish literature helps to ensure that each patient has a chance to understand what was found during the examination. If you give the patient a brochure describing the condition and treatment in their own language, it is more likely that they will understand and correctly follow the treatment you suggest.

Clinicolegal aspects are of utmost importance today, and the instruction tear off sheets help to ensure that things that you tell the patient are documented properly. Having one copy for patients and one copy in the chart does more than just cover the legal end. It also reinforces what you are telling the patient and ensures that they will understand and comply with your recommendations.

To help determine the effectiveness of our project, we distributed a survey to all third year interns at PUCO. Of the 80 surveys distributed, 38 interns responded. 29 of the respondents were aware that PUCO had

brochures available, but only 15 knew where they were located under the old system. 32 respondents felt that the brochures were not easy to access under the old system. 27 felt that they did not have sufficient time to explain the patient's condition adequately, and 26 of those respondents felt that sending the patient home with a brochure would help.

All respondents reported that the brochures became easier to access under the new system, and that they felt patients appreciated the brochures. All of the respondents also report that they think brochures help in patient communication and education. 27 found themselves using the brochures more than before. 26 found the instruction tear-off sheets to be useful.

One area that was not addressed formally but was discussed throughout our project was the informed refusal for dilation. Currently we do not have a legally binding form that patient can sign when they refuse dilation in our clinics. This is a very technical and difficult area of patient care which requires a detailed research along with a help of a legal counsel. We believe it is a very important and necessary part of Optometric practice and therefore worth further investigation and research in the future. We have included a tentative model which can be refined in future projects.

In order for a patient literature system to function effectively and efficiently, someone needs to be responsible for maintaining the system. This can be difficult in an educational clinic where the interns are constantly rotating in and out. It is hard to just delegate this as part of an already busy existing employees duties, or to try and add it to the number of things a new employee is asked to learn. One option may be to delegate it to the third year secretary to maintain as third years are located at the Forest Grove clinic and are active in clinical practice. It is an ongoing problem that needs to be looked at in order to maintain an effective and efficient literature system at Pacific.

## APPENDIX



## INTERN SURVEY COMMENTS

"I especially like the Spanish brochures"

"Great Job!"

"Haven't used tear-off sheets yet, but I will"

"Used brochures for ARMD, DR, binocular vision, & myopia"

"Several times (before restructuring) I felt patients didn't get it during explanations"

"(Before restructuring) I didn't know about the brochures before, but if I had I would have wanted to send them home with patients a lot"

"Haven't had a chance to use the tear-offs yet but they look good-Good job"

## FACULTY SURVEY COMMENTS

-I didn't mark the Spanish ones because I don't understand Spanish - but we do need Spanish.

-Diabetic retinopathy in Spanish

-Informed consent

-Good display ideas!

-DISEASE

-All are potentially beneficial for the appropriate patient. Possibly identifying key areas and having a few, rather than several brochures that address the areas in general terms.

-Seem to be good ideas

-Low vision brochures should be in large print.

-Do any mention refractive surgery?

-Great ideas.

-Don't understand / speak Spanish so need literature.

-Disease is very helpful.

-Good ideas.

-Ideas are good.

-Need all of the disease ones.

-Brochures are helpful especially for patients coming to the front desk asking questions. We can hand them one to read.. Some seem to be redundant.

Maybe we don't need all of these. I like disease ones, they are most asked for. Same with VT.

-What I'd like to see: 1. diabetes: systemic manifestations. 2. HTN: ocular and systemic. 3. Pterygia: any info. 4. Pingueculae: any info. 5. Thyroid eye disease.

-Any on when to call the doctor with contact lens problems.

-Without knowing the content of each one I can't comment on whether "Vision and aging" is better than "Your vision the second fifty years", for instance.

# MACULAR DEGENERATION



Macular degeneration is the leading cause of central vision loss among older people. It results from changes to the macula, a portion of the retina, responsible for clear, sharp vision, and located on the inside back wall of the eye.

The macula is many times more sensitive than the rest of the retina and without a healthy macula, seeing detail or vivid color is not possible.

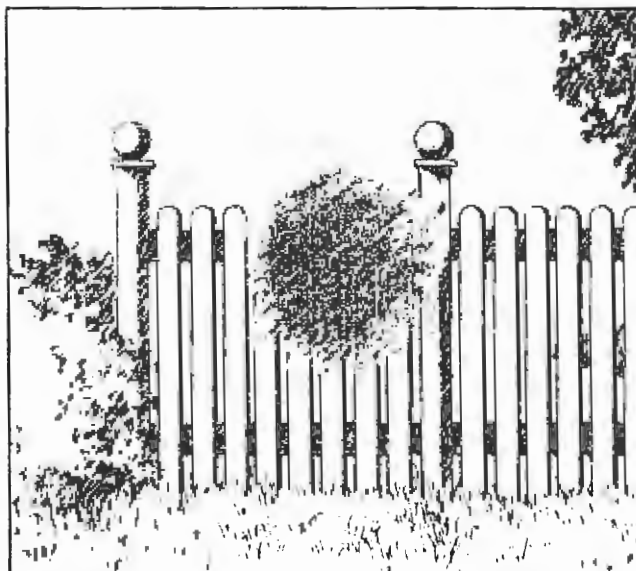
There are several causes for macular degeneration. In one type, the tissue of the macula becomes thin and stops working well. This type is thought to be a part of the natural aging process in some people.

In another, fluids from newly formed blood vessels leak into the eye and cause vision loss. If detected early, this condition can be treated with laser therapy, but early detection and prompt treatment is vital in limiting damage.

Macular degeneration develops differently in each person, so the symptoms may vary. But, some of the most common symptoms include:

- A gradual loss of ability to see objects clearly
- Distorted vision. Objects appear to be the wrong size or shape or straight lines appear wavy or crooked
- A gradual loss of clear color vision
- A dark or empty area appearing in the center of vision.

These symptoms may also indicate other eye health problems, so if you are experiencing any of these, you should contact your doctor of optometry immediately.



*As macular degeneration advances, a dark or empty area often appears in the center of vision.*

In a comprehensive eye examination, your doctor will perform a variety of tests to determine if you have macular degeneration or another condition causing your symptoms.

Unfortunately, there is no way to restore central vision damaged by macular degeneration. However, since macular degeneration does not damage side vision, low vision aids such as telescopic and microscopic special lenses, magnifying glasses and electronic magnifiers for close work, can be prescribed to help make the most of remaining vision. Often, a person, with adaptation, can cope well and continue to do most things they were accustomed to doing.

Remember! Early detection of macular degeneration is the most important factor in determining if you can be treated effectively. Use the simple vision check on the back side of this sheet and maintain a regular schedule of optometric examinations to help protect your vision.

*(over, please)*

**HEALTHY EYES MEAN A BETTER LIFE**

### Early Detection Chart

**Directions for using the chart:**

1. Wear your reading glasses or bifocals and have good lighting on card. Hold card facing you so you can read side A. Cover your left eye.
2. Hold card at arm's length and stare only at small dot while bringing chart toward your eye.
3. Pull the card toward you until the large "◆" disappears from view. The lines should look straight and black.
4. If lines appear wavy, grey or fuzzy, draw on top of them and show chart to your optometrist.
5. Turn card upside down to read side B. Close your right eye and follow steps 2, 3 and 4.

Be sure to call your optometrist immediately if you notice a change, or if you don't understand how to use the chart. This screening test does not replace a thorough eye examination by your optometrist.

Compliments of:



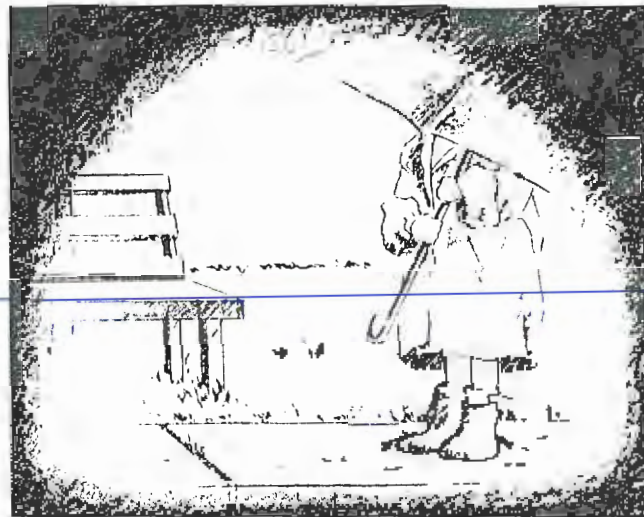
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**G**laucoma is an eye disease in which the passages that allow fluid in the eye to drain become clogged or blocked. This results in the amount of fluid in the eye building up and causing increased pressure inside the eye. This increased pressure damages the optic nerve which connects the eye to the brain. The optic nerve is the main carrier of vision information to the brain. Damage to it results in less information sent to the brain and a loss of vision.

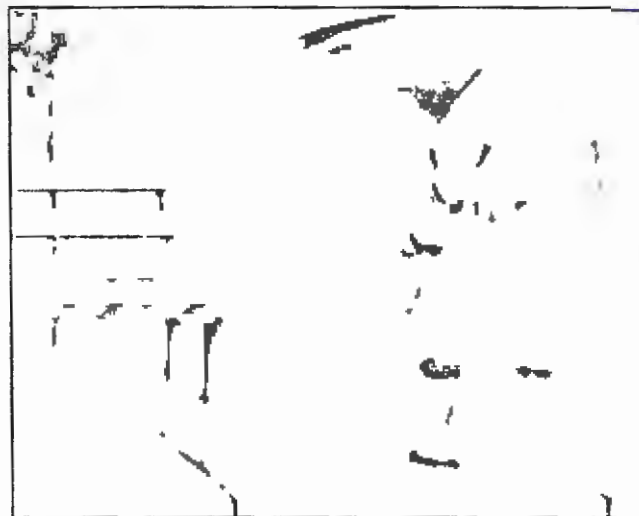
The exact cause of glaucoma is not known and, it cannot currently be prevented. It is one of the leading causes of blindness in the U.S. But, if detected at an early stage and treated promptly, glaucoma can usually be controlled with little or no further vision loss. That's why regular optometric examinations are so important. People of all ages can develop glaucoma, but it most frequently occurs in people:

- who are over age 40
- who have a family history of glaucoma
- who are very nearsighted
- who are diabetic
- who are black

Of the different types of glaucoma, primary open angle glaucoma often develops gradually and painlessly, without warning signs or symptoms. This type of glaucoma is more common among blacks than whites. It can cause damage and lead to blindness more quickly in blacks, making regular eye examinations, including tests for glaucoma,



*Noticeable symptoms of glaucoma may be a gradual loss of side vision (above) or blurred vision (below).*



particularly important for blacks over age 35. Another type, acute angle-closure glaucoma, may be accompanied by:

- blurred vision
- a loss of side vision
- appearance of colored rings around lights
- pain or redness in the eyes

*(over, please)*

## HEALTHY EYES MEAN A BETTER LIFE

Regular eye examinations are an important means of detecting glaucoma in its early stages, and will include:

- Tonometry – a simple and painless measurement of the pressure in the eye.
- Ophthalmoscopy – an examination of the back of the eye to observe the health of the optic nerve.
- Visual field test – a check for the development of abnormal blind spots.

Glaucoma can usually be treated effectively by using eye drops or other medicines. In some cases surgery may be necessary.

Unfortunately, any loss of vision from glaucoma cannot usually be restored.

But, early detection, prompt treatment and regular monitoring can enable you to continue living in much the same way as you have always lived.

Protect your eye health and your vision...Be sure to visit your doctor of optometry regularly.

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A cataract is a clouding or darkening that develops in the normally clear lens of the eye. This prevents the lens from properly focusing light on the retina, at the back of the eye, resulting in a loss of vision. It is not a film that grows over the surface of the eye.

No one is exactly sure what causes a cataract, but it is known that chemical changes within the lens cause it to become cloudy. This is often thought of as a part of the natural aging process, but it may also result from heredity, an injury or disease.

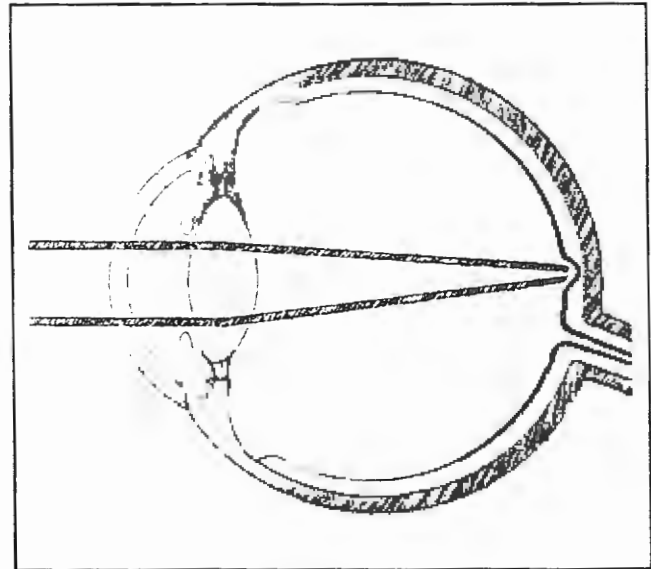
Cataracts are most often found in persons over age 55, but are also occasionally found in younger persons, even newborns.

Cataracts usually develop in both eyes, but often at different rates. Some cataracts develop slowly over a period of years and others form rapidly within a few months.

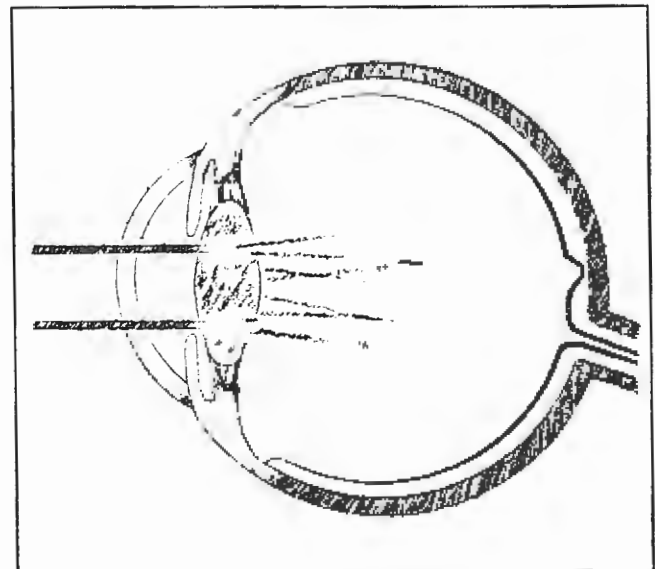
In a comprehensive eye examination, your doctor of optometry can determine whether or not you have cataracts.

Cataracts vary in their development from person to person, so the symptoms may also vary. Here are some common symptoms that people experience:

- increasing haziness causing blurred or distorted vision...colors may seem yellowed
- the appearance of dark spots or shadows that seem to move when the eye moves
- an increasing need for more light to see clearly
- a tendency to become more nearsighted because of increasing density of the lens



*Light enters the eye through the lens and is focused on the retina (above). A cataract, a clouding of the lens, prevents light from being focused properly on the retina (below).*



- double vision
- a gradual loss of color vision
- a stage where it is easier to see without glasses...second sight

*(over, please)*



## HEALTHY EYES MEAN A BETTER LIFE

Currently, there is no proven method to prevent cataracts from forming or to make the cloudy lens clear after a cataract has developed. Your doctor of optometry can prescribe changes in your glasses or contact lenses to help you see more clearly as your cataract develops.

Ultimately, if your cataract impairs your daily activities, your optometrist can refer you to an eye surgeon who may recommend surgical removal of the cataract. The surgery is relatively uncomplicated and has a 95% success rate.

When your eye's natural lens is removed during cataract surgery, some type of

treatment is usually needed to achieve clear, comfortable vision.

Intraocular lenses, contact lenses and glasses are all common forms of post-cataract vision correction. Intraocular lens implants are inserted at the time of surgery and serve as "new" lenses. Daily wear and continuous wear contact lenses have also become increasingly popular as post-cataract vision correction.

Whatever the treatment, regular optometric followup care is important in making sure you maintain good vision and eye health.

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# DIABETIC RETINOPATHY



Diabetes is a condition that can interfere with the body's ability to use and store sugar. Diabetes can also, over time, weaken and cause changes in the small blood vessels that nourish the eye's light sensitive retina. When this occurs, it is

called diabetic retinopathy. These changes may include leaking of blood, development of brush-like branches of the vessels and enlargement of certain parts of the vessels.

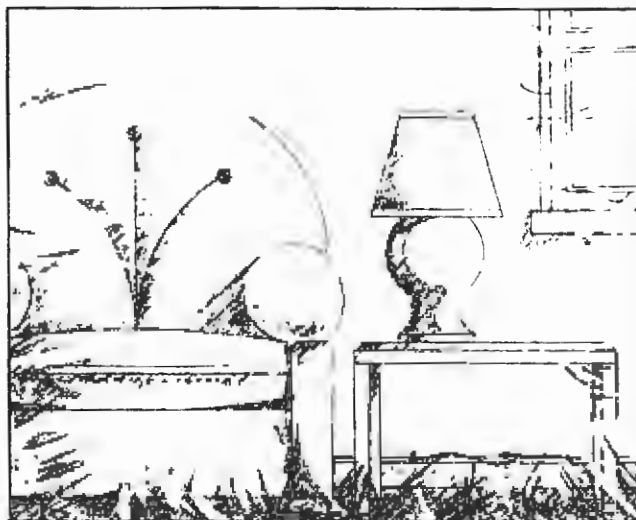
Diabetic retinopathy can seriously affect vision and, if left untreated, cause blindness.

Since this disease can cause blindness, early diagnosis and treatment is essential. That's one reason why it is important to have your eyes examined periodically by a doctor of optometry, especially if you are a diabetic or if you have a family history of diabetes.

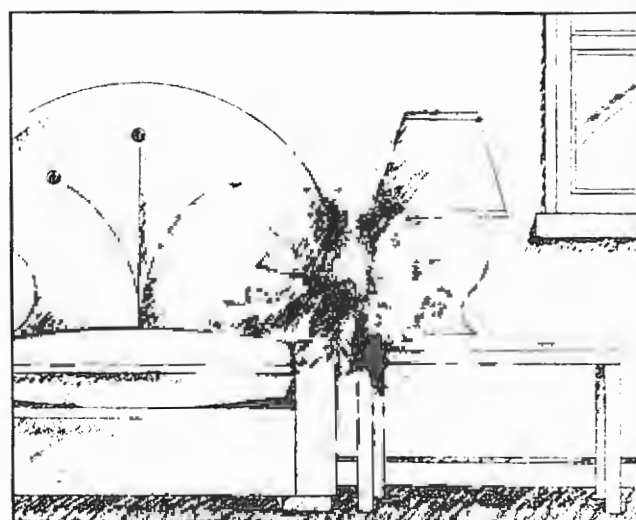
During a thorough, comprehensive eye examination, your optometrist gets to know you, your family history, your lifestyle and your vision needs.

To detect diabetic retinopathy, your doctor can look inside your eyes with an instrument called an ophthalmoscope, which lights and magnifies the blood vessels in your eyes. The interior of your eyes may also be photographed to provide more information.

The beginning stages of diabetic retinopathy may cause blurriness in your central or peripheral (side) vision, or it may produce no visual symptoms at all. It mainly depends on



*Blurred central or side vision (above) or a blind spot in central vision (below) may indicate diabetic retinopathy.*



where the blood vessel changes are taking place in your eye's retina (the light sensitive tissue at the back of the eye where images are focused). As diabetic retinopathy progresses, you may notice a cloudiness in your vision, blind spots or floaters. This is usually caused

*(over, please)*

**HEALTHY EYES MEAN A BETTER LIFE**

## HEALTHY EYES MEAN A BETTER LIFE

by blood leaking from abnormal new vessels which blocks light from reaching the retina.

In the advanced stages, connective scar tissue forms in association with new blood vessel growth, causing additional distortion and blurriness. Over time, this tissue can shrink and detach the retina by pulling it toward the center of the eye.

Once diabetic retinopathy has been diagnosed by your optometrist, laser and other surgical treatments can be used to reduce the progression of this eye disease and decrease the risk of vision loss. Ask your optometrist to explain the types of treatment available and those best suited to you.

If you experience vision loss due to diabetic retinopathy, your optometrist may prescribe special low vision aids to help maximize your remaining vision. Some of the optical aids available include telescopic lenses for distance vision, microscopic lenses,

magnifying glasses and electronic magnifiers for close work.

Not every diabetic patient develops retinopathy, but the chances of getting it do increase after having diabetes for several years. Evidence also suggests that such factors as pregnancy, high blood pressure and smoking may cause diabetic eye disease to develop or worsen.

As a diabetic, or a person at risk, it is important that you take steps to help prevent the development of diabetic retinopathy, including:

- Take your prescribed medication as instructed.
- Follow a proper diet.
- Exercise regularly.
- Have your eyes examined regularly.

By doing so, chances are good that you can enjoy a lifetime of good vision and health.

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The natural tears that your eyes produce are composed of three layers:

- the outer oily layer
- the middle watery layer
- the inner mucus layer

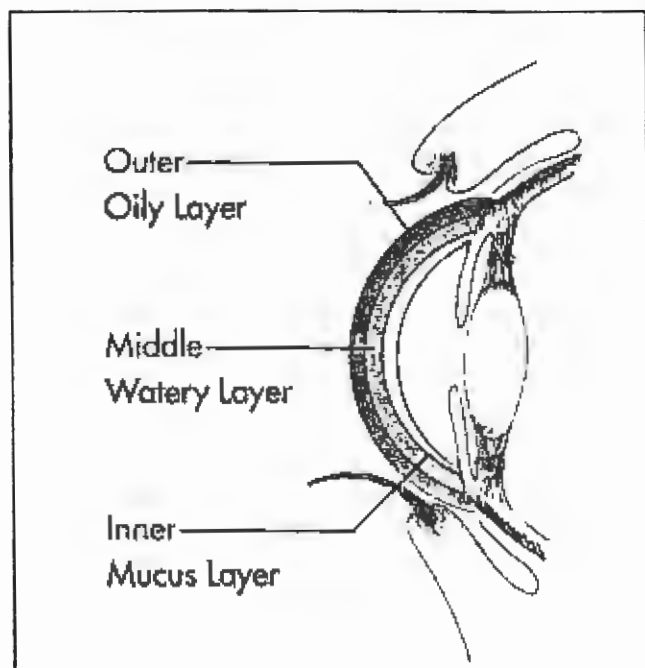
Dry eye is the term used to describe eyes that do not produce enough tears or tears with the proper chemical composition in any of these layers.

Dry eye is most often a result of eyes' natural aging process. Most peoples' eyes tend to become drier as they age, but the degree of dryness varies and some people have more problems than others. In addition to age, dry eye can result from:

- problems with normal blinking
- certain medications like antihistamines, oral contraceptives and antidepressants
- environmental factors like a dry climate and exposure to wind
- general health problems like arthritis or Sjogren's syndrome
- chemical or thermal burns to the eye

Dry eye symptoms are often different in different people, but the following are commonly experienced by those whose tear production is inadequate:

- irritated, scratchy, dry or uncomfortable eyes
- redness of the eyes
- a burning sensation of the eyes
- a feeling of a foreign body in the eye



***All three layers of tears, the outer oily layer, the middle watery layer and the inner mucus layer are produced by different parts of the eye and are necessary for proper lubrication.***

- blurred vision
- excessive watering as the eyes try to comfort an overly dry eye
- eyes that seem to have lost the normal clear glassy luster

If untreated, dry eye can be more than just irritating or uncomfortable.

Excessive dry eye can damage eye tissue and possibly scar the cornea, the transparent front covering of the eye, impairing vision. Contact lens wear may be more difficult due to the possibility of increased irritation and a greater chance of eye infection.

*(over, please)*

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If you are experiencing the symptoms of dry eye, your optometrist can perform "dry eye" tests using diagnostic instruments to give a highly magnified view and special dyes to evaluate the quality, amount and distribution of tears. Your optometrist will also need to know about your every day activities, your general health, medications you are taking and about environmental factors that may be causing your symptoms.

Unfortunately, dry eye cannot be cured, but your eye's sensitivity can be lessened and treatment prescribed so that your eyes remain healthy and your vision is not affected. Possible treatments include:

- frequent blinking to spread tears over the eye, especially when using a steady focus for an extended period

- changing environmental factors like avoiding wind and dust and increasing the level of humidity
- using artificial tear solutions
- using moisturizing ointment, especially at bedtime

Other forms of medication:

- insertion of small plugs in the corner of the eyes to slow drainage and loss of tears
- in rare cases, surgery may be recommended

Whatever treatment is prescribed for you, it is very important that you follow your doctor of optometry's instructions carefully. Dry eye does not go away, but by working together, you and your doctor can keep your eyes healthy and protect your good vision.

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# LASHES, FLOATERS AND VITREOUS DETACHMENT



**F**loaters, sometimes called spots, are small, and semi-transparent or cloudy particles that float within the vitreous, the clear, jelly-like fluid that fills the inner portion of your eyes.

Floaters are usually harmless and are seen by many of us at one time or another.

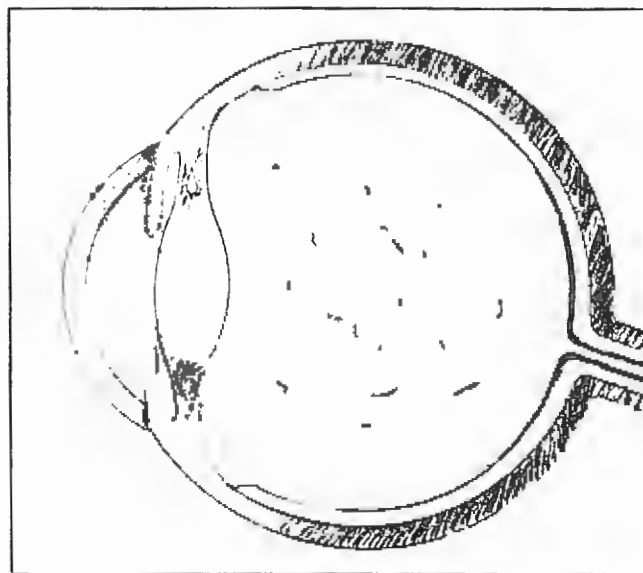
They generally look like translucent specks of various shapes and sizes or like cobwebs. They are frequently visible when you are looking at a plain lighted background like a blank pastel wall, a blue sky or the white pages of a book.

Floaters become visible when they fall within the line of sight and cast a shadow on the retina (the light sensitive portion of the back of the eye).

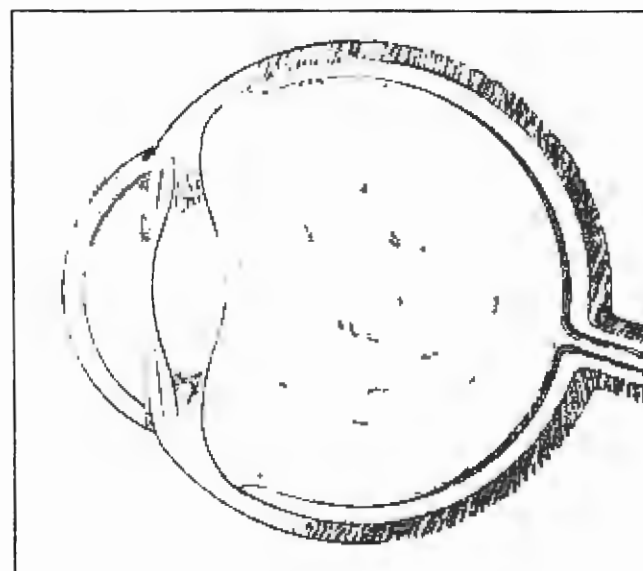
There are a number of possible causes for floaters. They may be small flecks of protein or other matter that were trapped during the formation of your eyes before birth and remain suspended in the clear fluid of the vitreous.

Deterioration of the vitreous fluid may also cause floaters to develop. This can be part of the natural aging process and is often not serious, though it can be very annoying. And, certain eye diseases or injuries can cause floaters.

Sometimes flashes or streaks of light may appear. This may be happening because the jelly-like vitreous is shrinking and pulling on the retina. The retinal receptor cells are



*Floaters, small, semi-transparent or cloudy particles that are suspended in your eyes are usually harmless and are seen by many of us at one time or another, however...*



*...flashes or the appearance of streaks of light can be symptoms or signs of vitreous or retinal detachment and should be quickly seen by your optometrist.*

*(over, please)*

**HEALTHY EYES MEAN A BETTER LIFE**

## HEALTHY EYES MEAN A BETTER LIFE

stimulated to "fire" by this tugging action and cause the perception of light flashes.

Vitreous shrinkage can continue and result in a part of the vitreous actually becoming detached or peeled away from the back of your eye. Flashes, floaters and vitreous detachment are common and only infrequently lead to serious eye problems.

On rare occasions, vitreous detachment can cause small tears or holes in the retina. The damaged part of the retina subsequently does not work properly and a blind or blurred spot in vision results. If untreated, retinal tears or holes can continue to worsen and severe vision loss can result if the retina becomes detached.

While flashes and floaters can be symptoms or signs of either vitreous detachment or retinal detachment, vitreous involvement occurs far more frequently and usually requires no treatment.

It is important to have a comprehensive eye health examination soon after experiencing flashes or floaters, or if you become aware of an increase in the number or intensity of flashes or floaters. In a comprehensive examination, your doctor of optometry can use a variety of special instruments to look at the vitreous, the retina and the other interior parts of your eyes to determine the causes of the flashes and floaters that you see.

That's why regular optometric examinations are an important part of keeping your eyes and vision healthy.

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Visit the AOA Worldwide Website at [www.aoanet.org/aoanet](http://www.aoanet.org/aoanet)

# HALAZIA AND STYES

Your eyelids are very important. They do much to protect your eyes from approaching objects and irritating particles in the air. When you blink, your eyelids help to remove foreign objects and distribute tears which lubricate your eyes. But, sometimes your eyelids can have problems and need care. Two common conditions that affect your eyelids are chalazia and styes.

A chalazion results from a blockage of one or more of the small oil producing glands (meibomian glands) that are found in the upper and lower eyelids. These blockages trap the oil produced by the glands and cause a lump on the eyelid that is usually about the size of a pea.

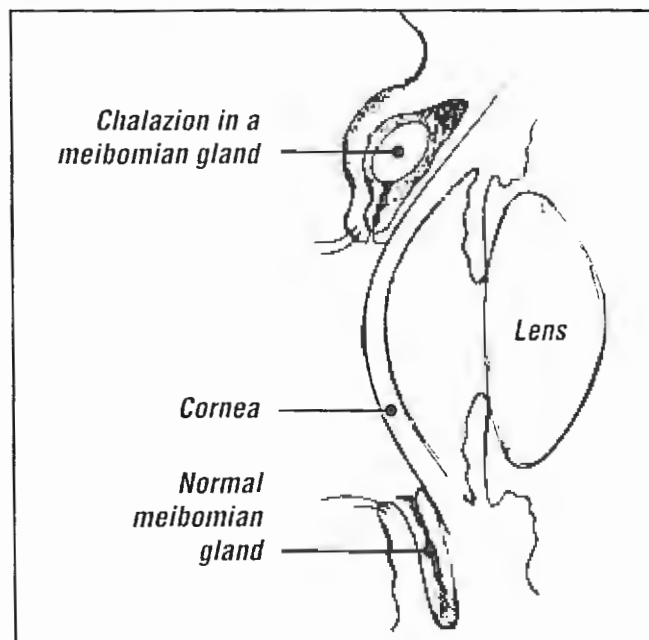
These are usually relatively painless. If the chalazion becomes infected, the eyelid can become swollen, inflamed and more painful.

Styes are often confused with chalazia. Styes are infections or abscesses of an eyelid gland near an eyelash root or follicle.

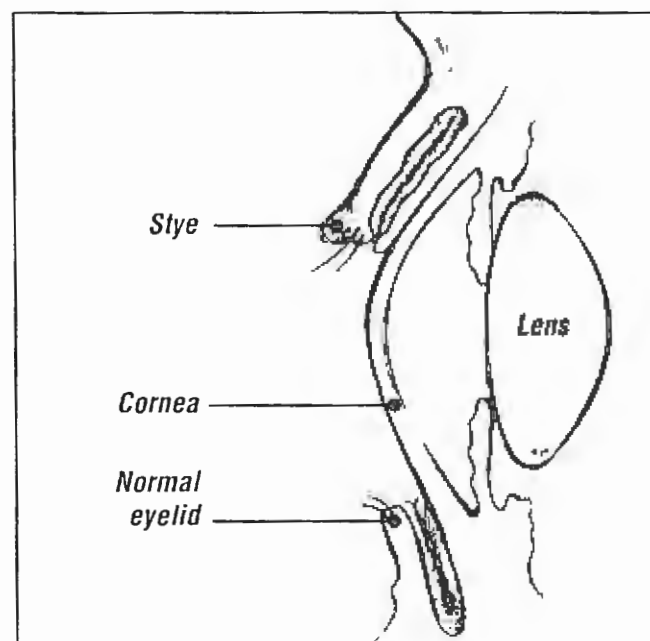
They generally occur nearer to the edge, or margin of the eyelid than do chalazia, where they form a red, sore lump similar to a boil or pimple.

In some cases, both chalazia and styes may come to a head and drain on their own without treatment. However, in most instances, they do not.

A chalazion may be treated by applying hot\* compresses (see box on reverse side); and/or antibiotic eye drops. In some cases, steroid  
(over, please)



*A chalazion (above) is a lump inside the eyelid caused by a blockage in a small oil producing gland. A stye (below) is a similar swelling near the edge of the eyelid caused by an infected gland near the root or follicle of an eyelash.*



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## HEALTHY EYES MEAN A BETTER LIFE

drugs may be injected into or adjacent to the site of the chalazion. A chalazion may also be treated by surgical incision and drainage when necessary.

Styes may also be treated with hot\* compresses. Frequently, antibiotic and/or steroid eye drops or ointments may be needed.

Chalazia and styes most often respond well to treatment. If left untreated, however, they can be uncomfortable, unattractive and can lead to other problems. Occasionally, chalazia and styes recur. If this happens too frequently, your doctor of optometry may recommend additional tests to determine if other health problems may be contributing to their development.

### **Directions For Application Of Hot\* Compresses**

- 1** Wash your hands thoroughly.
- 2** Moisten a clean washcloth with hot\* water.
- 3** Close eyes and place the washcloth on the eyelid for about 10-15 minutes.
- 4** Remoisten washcloth as necessary to keep hot\*.
- 5** Repeat at least 4 times a day.

\*Caution: Be careful that hot water does not cause burns.

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# BLEPHARITIS

Blepharitis is a chronic or long term inflammation of the eyelids and eyelashes. It affects people of all ages.

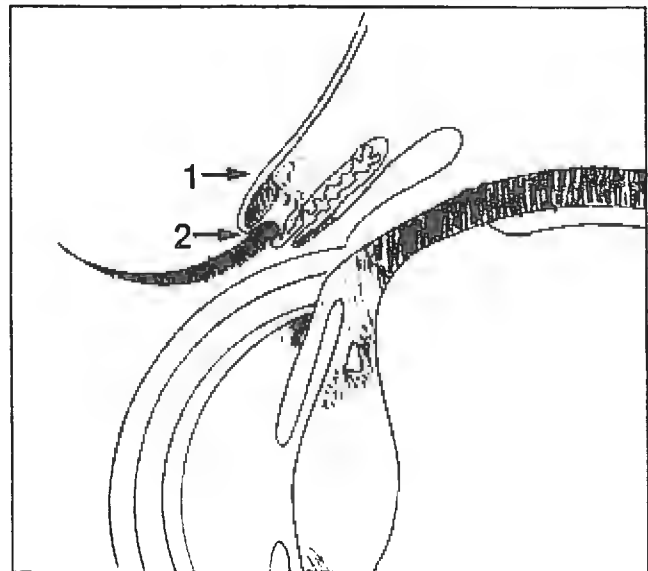
Among the most common causes of blepharitis are:

- poor eyelid hygiene
- excess oil produced by the glands in the eyelids
- a bacterial infection (often staphylococcal)
- an allergic reaction

There are two ways in which blepharitis may appear. The most common and least severe, seborrheic blepharitis, is often associated with dandruff of the scalp or skin conditions like acne. It usually appears as greasy flakes or scales around the base of the eyelashes and as a mild redness of the eyelid.

Sometimes, it may result in a roughness of the (normally smooth) tissue that lines the inside of the eyelids; or chalazia, which are nodules on the eyelids (often painless and firm in texture). And, acute infection of the eyelids can result in styes.

Ulcerative blepharitis is a less common, but more severe condition that may be characterized by matted, hard crusts around the eyelashes, which, when removed, leave small sores that may bleed or ooze. There may also be a loss of eyelashes, distortion of the front edges of the eyelids and chronic tearing.



***Blepharitis is a chronic inflammation that affects the eyelids (1) and the eyelash hair follicles (2). Careful eyelid hygiene can do much to control blepharitis.***

In severe cases, the cornea, the transparent covering of the front of the eyeball, may also become inflamed.

In many cases, good eyelid hygiene and a regular cleaning routine may control blepharitis. This routine can include:

- frequent scalp and face washing
- warm soaks of the eyelids
- eyelid scrubs

In cases where bacterial infection is the cause, eyelid hygiene may be combined with various antibiotics and other medications; and

*(over, please)*

## HEALTHY EYES MEAN A BETTER LIFE

if the cause is an allergic reaction, the source of the reaction (eye makeup, for example) should be removed.

Eyelid hygiene, in all cases, is particularly important upon awakening because debris can build up during sleep.

Blepharitis is usually not serious and can often be treated easily, but if left untreated, can be very uncomfortable, unattractive and lead to more serious problems.

### Directions For A Warm Soak Of The Eyelids

1. Wash your hands thoroughly.
2. Moisten a clean washcloth with warm water.
3. Close eyes and place washcloth on eyelids for about 5 minutes.
4. Repeat several times daily.

Your doctor of optometry can determine the cause and recommend the right combination of treatment specifically for you.

### Directions For An Eyelid Scrub

1. Wash your hands thoroughly.
2. Mix warm water and a small amount of shampoo that does not irritate the eye (baby shampoo).\*
3. Close one eye and using a clean washcloth (a different one for each eye) rub the shampoo mixture back and forth across the eyelashes and the edge of the eyelid.
4. Rinse with clear, cool water.
5. Repeat on other eye.

\* There are also commercially prepared lid scrub solutions that your doctor of optometry may recommend.

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# Lo que debe saber sobre las cataratas

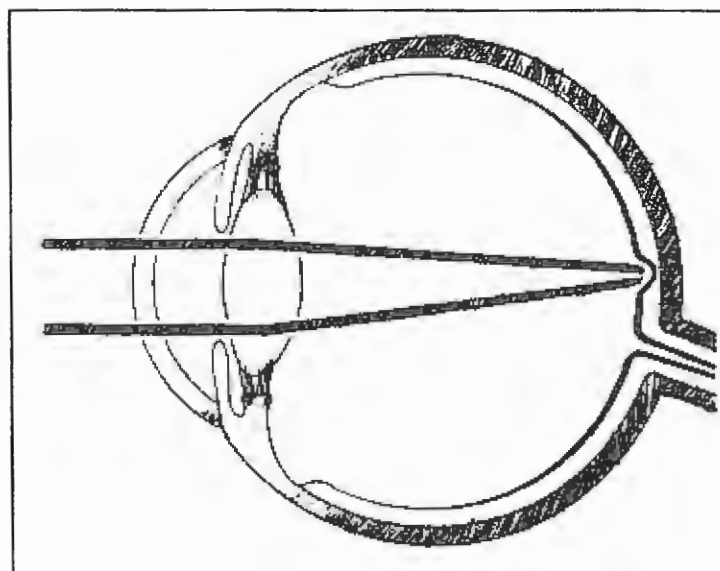


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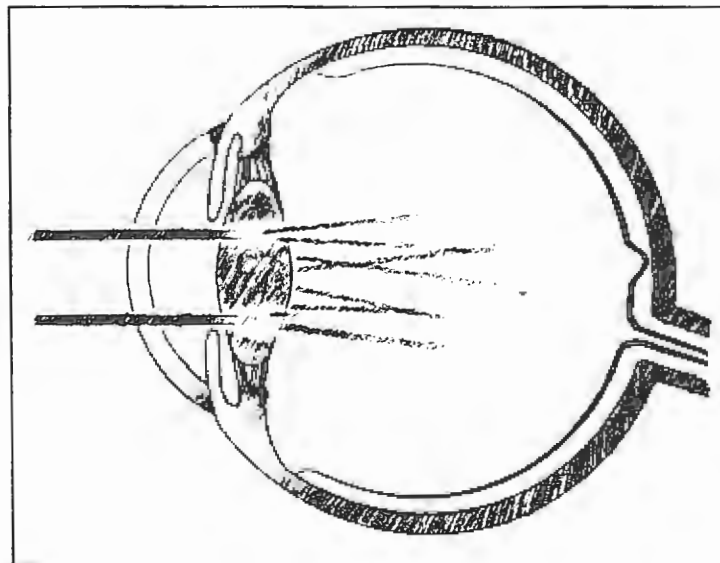
**L**a catarata es una nebulosidad del cristalino del ojo que impide que la luz se enfoque correctamente en la retina detrás del ojo. Sin un enfoque correcto, el ojo no puede percibir imágenes nítidas y claras y puede ocurrir pérdida de la visión. Las cataratas no son una película que crece sobre la superficie de los ojos.

Nadie sabe cuál es el origen de las cataratas, pero parecen ser parte del proceso natural de envejecimiento. Las cataratas se presentan con más frecuencia en las personas mayores de 55 años, pero en ocasiones, también afectan a personas más jóvenes, incluso los recién nacidos. La radiación ultravioleta (UV) de la luz solar parece contribuir al desarrollo de cataratas. Con el fin de proteger los ojos, se recomienda a las personas de cualquier edad el uso de gafas para el sol, que bloqueen hasta el 99 por ciento de los rayos UV, y de sombrero o gorra con visera cuando estén afuera en los días brillantes y soleados.

Su doctor en optometría puede detectar la presencia de cataratas durante un examen completo de la vista. Si las cataratas se desarrollan lentamente y no afectan significativamente la visión, quizás no se requiera tratamiento inmediato. Si las cataratas se desarrollan rápidamente o han progresado a una etapa avanzada, su optómetra puede ayudarle con los arreglos necesarios para que un cirujano oftalmólogo las remueva. Gracias a los avances en la tecnología y el cuidado de los ojos, la cirugía de cataratas es relativamente fácil y tiene un índice de éxito del 95 por ciento. Después de



*La luz entra al ojo a través del cristalino y se enfoca en la retina (arriba). La catarata, una nebulosidad en el cristalino, impide que la luz se enfoque correctamente en la retina (abajo).*



la cirugía, su doctor en optometría podría recetarle gafas o lentes de contacto para ayudarle a que su visión sea más clara y confortable.

*(Vea atrás)*

# Lo que debe saber sobre las cataratas

.....  
(Continuación)

## Síntomas comunes

Si usted está desarrollando cataratas, puede notar que su visión aparece nebulosa o borrosa. Los colores pueden lucir amarillentos y menos vívidos. También quizás vea manchas o sombras que parecen moverse cuando mueve los ojos y puede necesitar más luz que la normal para ver claramente. Algunas personas con cataratas ven los objetos cercanos con mayor claridad que los objetos distantes, en tanto que otras pueden

experimentar visión doble. Incluso, algunas personas con cataratas pueden pasar por una etapa en la cual ven mejor sin sus gafas regulares.

Siempre debe comunicar cualquier síntoma de cataratas a su doctor en optometría. Si el optómetra le diagnostica cataratas, vigilará su desarrollo y sugerirá un plan de tratamiento apropiado. La atención posterior de su optómetra ayudará a garantizar una buena visión y la salud de sus ojos.

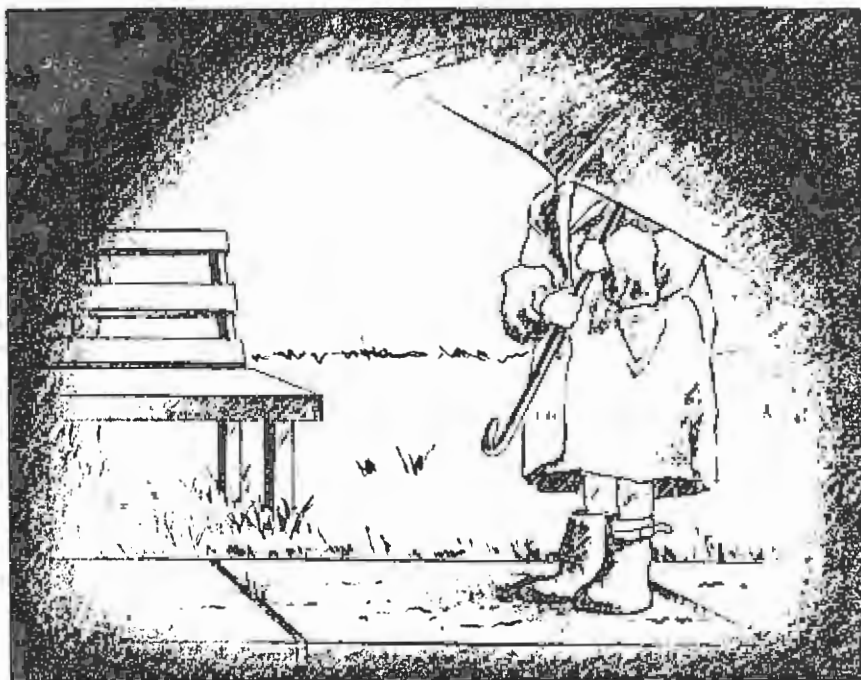
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# Lo que debe saber sobre el glaucoma



El glaucoma es una enfermedad de los ojos que ocurre cuando el fluido producido en los ojos no puede drenarse por los conductos normales. Cuando los conductos quedan bloqueados o tupidos, el fluido se acumula en el ojo y ejerce presión sobre el nervio óptico.

El nervio óptico transporta los mensajes visuales de los ojos al cerebro. Con el aumento de la presión, el nervio se daña y no puede transmitir tan bien los mensajes y el paciente con glaucoma puede sufrir pérdida de la visión.



*Los síntomas perceptibles del glaucoma pueden ser una pérdida gradual de la visión lateral (arriba) o una visión borrosa (abajo).*



Se desconoce el origen del glaucoma, y la enfermedad no puede prevenirse. En sus primeras etapas, el glaucoma no presenta señales de alerta, pero puede diagnosticarse y tratarse temprano cuando se detecta durante un examen completo de la vista. Por este motivo, es muy importante obtener un examen de la vista de acuerdo con un programa recomendado por su doctor en optometría.

El glaucoma pueda afectar a las personas de cualquier edad, pero las investigaciones señalan que la

*(Vea atrás)*

# Lo que debe saber sobre el glaucoma

*(Continuación)*

enfermedad ocurre más frecuentemente en las personas de la raza negra, las mayores de 40 años, las que tienen antecedentes de glaucoma en la familia y en las que son muy miopes o padecen de diabetes.

Las pruebas sencillas y sin dolor del glaucoma forman parte de un examen completo de la vista. Si se detecta el glaucoma, puede tratarse eficazmente con gotas para los ojos y

otros medicamentos. En algunos casos, puede necesitarse cirugía. Si usted tiene glaucoma, su optómetra le recomendará un plan de tratamiento apropiado para usted.

Lamentablemente, la pérdida de la visión debida al glaucoma no puede restaurarse. Por eso, nunca se podrá enfatizar demasiado la importancia de la detección y el tratamiento tempranos.

**Para ayudar a proteger sus ojos contra la pérdida de la visión debido al glaucoma, obtenga un examen completo de la vista de acuerdo con un programa recomendado por su doctor en optometría.**

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# Trastornos de la salud que pueden afectar sus ojos



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**L**os trastornos de la salud que afectan su cuerpo también pueden afectar su vista y la salud de sus ojos. Por este motivo, es muy importante seguir todas las instrucciones de su optómetra y de su médico. No esté tentado a suspender el tratamiento cuando comience a sentirse mejor; muchos trastornos de la salud exigen tratamiento continuo para mantener saludables el cuerpo y los ojos.

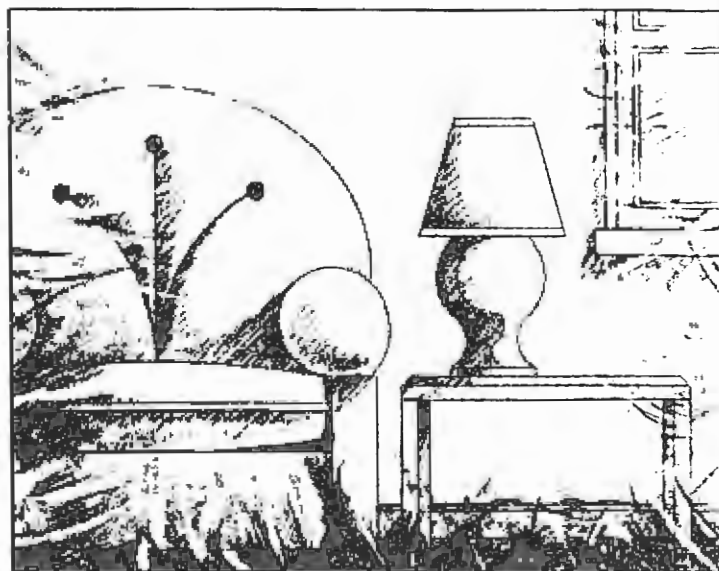
## ¿Qué es la retinopatía?

La diabetes y la hipertensión arterial son dos trastornos de la salud comunes que pueden afectar y debilitar los pequeños vasos sanguíneos que alimentan la retina del ojo, el revestimiento sensible a la luz en la parte posterior del ojo y que es esencial para la visión. Sin un flujo de sangre adecuado, la retina puede dañarse ocasionando una pérdida parcial de la vista o la ceguera. Esta afección se llama retinopatía.

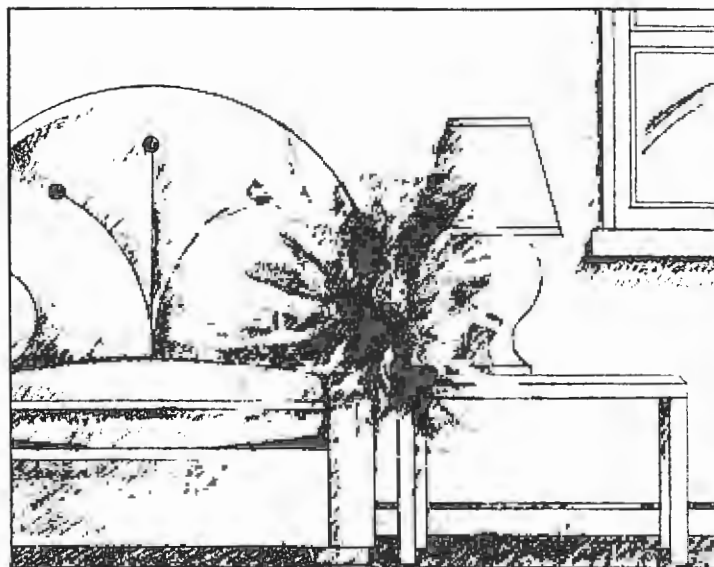
Con frecuencia, la hipertensión arterial y la diabetes presentan, si acaso, pocos síntomas tempranos. Por eso, es muy importante obtener exámenes de la vista de acuerdo con un programa recomendado por su doctor en optometría, para cerciorarse de que sus ojos no estén afectados por la retinopatía.

## Tratamiento

Si se le ha diagnosticado diabetes o hipertensión arterial, es esencial que siga las instrucciones de su optómetra y de su médico.



*Una visión borrosa central o lateral (arriba) o un punto ciego en la visión central (abajo) pueden ser señales de retinopatía diabética.*



Su salud general y el manejo de estas condiciones pueden beneficiarse de una dieta especial y de ejercicios regulares. Quizás también necesite fármacos de receta y visitas más frecuentes a su optómetra y médico.

*(Vea atrás)*



# Trastornos de la salud que pueden afectar sus ojos

(Continuación)

Algunos casos de retinopatía diabética e hipertensiva avanzada pueden tratarse con procedimientos de laser y quirúrgicos. En el momento en que este tratamiento pudiere ser necesario, su doctor en optometría le explicará en detalles el procedimiento y dispondrá los arreglos necesarios.

## Consejos

Para ayudar a su doctor en optometría en el cuidado de la salud de sus ojos, usted deberá:

- Informar a su optómetra respecto a su historial médico, incluso cualquier diagnóstico de diabetes, hipertensión arterial o altos niveles de colesterol. También informe a su doctor en optometría si sus abuelos, padres, hermanas o hermanos han padecido de cualquiera de estas afecciones.

- Diga a su optómetra los nombres de cualesquier medicamentos de receta o de venta libre que esté tomando o traiga los frascos con las etiquetas. Algunos medicamentos tienen efectos secundarios que pueden afectar temporalmente su visión.
- Siga todas las instrucciones de su optómetra y de su médico sobre dieta, ejercicios, medicamentos y visitas regulares. Recuerde que estas condiciones también pueden afectar su salud, incluso si no manifiesta ningún síntoma.
- Hable con su optómetra o médico sobre cualquier pregunta o inquietud que tenga. No confíe en información de segunda mano suministrada por amigos o familiares.
- Programe exámenes de la vista para sus familiares según lo recomendado por su doctor en optometría.

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# La salud de los ojos para usted y su familia



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**T**odos los días, usted y su familiares usan los ojos para disfrutar la vida, para trabajar, para leer y aprender y para cuidarse mutuamente. Ayude a cuidar de sus ojos adoptando estos hábitos saludables.

**OBTENGA** un examen completo de la vista de acuerdo con un programa recomendado por su doctor en optometría.

**INFORME** a su doctor en optometría si usted o algún familiar ha sufrido algún trastorno de la vista (por ejemplo, glaucoma o cataratas) o si padece de alguna condición médica (por ejemplo, diabetes, hipertensión arterial, etc.)

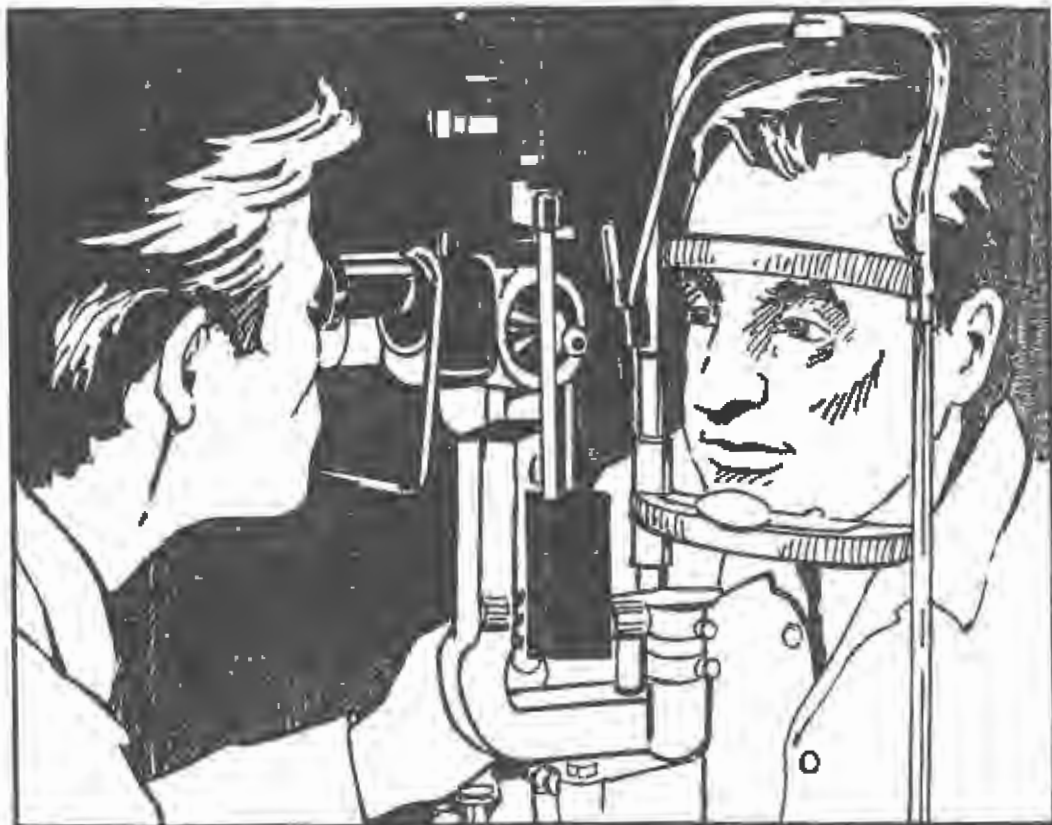
**CERCIORESE** de usar su prescripción actual (si usa gafas o lentes de contacto) y haga que su optómetra verifique el ajuste periódicamente.

**SIGA** las instrucciones de su optómetra para el cuidado de sus ojos y para la limpieza de sus lentes de contacto (si los usa).

**SIGA** las instrucciones de su optómetra y también de su médico si padece de alguna condición como la diabetes o la hipertensión.

Probablemente se requieran visitas más frecuentes a ambos facultativos.

**USE** gafas para el sol que bloqueen por lo menos el 99 por ciento de los rayos ultravioletas (UV)



cuando esté afuera en los días soleados. Las gafas para el sol también ayudan proteger a los ojos contra el polvo y el resplandor.

**EVITE** las lesiones a los ojos usando gafas de protección cuando trabaje con herramientas, maquinarias y productos químicos peligrosos. Solicite información a su optómetra.

**NO** descuide los exámenes de la vista de sus hijos. Los problemas de la vista pueden causar  
(Vea atrás)

# La salud de los ojos para usted y su familia

(Continuación)

problemas en la escuela. No confíe en las pruebas de la vista que se hacen en muchas escuelas; hace falta un examen completo de la vista para diagnosticar y tratar muchos trastornos de la vista y de la salud de los ojos.

NO trate de atender usted mismo cualquier lesión a los ojos. Evite tocar o frotar los ojos y consulte inmediatamente con un profesional del cuidado de la vista.

NO suspenda por su cuenta cualquier tratamiento prescrito. Siga todas las instrucciones de su optómetra por todo el tiempo indicado. Si usted esta bajo el cuidado de un médico por diabetes o hipertensión arterial, es sumamente importante que también siga sus instrucciones.

NO comparta gafas o lentes de contacto con amigos y familiares. Si usted usa lentes de contacto, siga meticulosamente los procedimientos de limpieza.

## Trastornos comunes de la vista

**Miopía:** Usted ve los objetos cercanos con mayor claridad que los que están lejos.

**Hipermetropía:** Usted ve los objetos lejanos con mayor claridad que los que están cerca.

**Astigmatismo:** Usted ve los objetos borrosos a cualquier distancia debido a que la parte delantera de su ojo (la córnea) tiene una forma ligeramente irregular.

**Presbiopia:** Su visión es borrosa cuando lee o mira objetos cercanos. La presbiopia es una consecuencia natural de la edad y se presenta entre los 40 y 45 años.

**Glaucoma:** Una acumulación de exceso de fluido en el ojo que ejerce presión sobre el nervio óptico. El glaucoma no tratado puede ocasionar una pérdida grave de la vista.

**Cataratas:** Una nebulosidad del cristalino del ojo que produce una visión borrosa o empañada. Usualmente, las cataratas se presentan con la edad, pero pueden diagnosticarse y tratarse con éxito.

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## INFORMED REFUSAL FOR DILATION OF THE PUPIL

Dilation of the pupil is a common diagnostic procedure used by optometrists to better examine the interior of the eye. It allows a more thorough examination by making the field of view wider and by permitting the doctor to see more of the inside of the eye. Being able to examine the inside of the eye is essential to determining that your eye is healthy.

To dilate the pupil, eye drops must be administered. They require roughly half an hour to take effect. Once your pupils are dilated, it is common to be sensitive to light, a symptom that is usually alleviated by sunglasses. If you do not have any sunglasses, a disposable pair will be provided for you. Another common symptom is blurred vision, especially at near. It will require about 4 to 6 hours for your vision to return to normal. During this time you must exercise caution when walking down steps, driving a vehicle, operating dangerous machinery, or performing other\* tasks that may present a risk of injury.

In about 2% of the people, there is a possibility of complications with dilation of the pupil. You must understand these complications before you give your consent or refusal to perform this procedure. There is a possibility of elevating the pressure inside your eye when dilation is performed. In certain cases, the angle in the anterior chamber can close, causing a serious impediment to your vision. However, these complications are very rare, as optometry literature only indicate about 2% of such incidences.

What you need to understand is that there is a tremendous benefit to you in having dilation performed because there are certain diseases and conditions which can only be detected and diagnosed with dilation. Some of these diseases require immediate treatment, thus there is a great advantage to having your eyes dilated.

The decision to refuse dilation is yours, however, it is important for you to understand that if you do decide to refuse dilation, the doctor cannot be legally responsible for those conditions in which dilation is necessary to make a proper diagnosis. If you have any questions concerning the procedure, please ask them now so that the doctor may answer them. Then, after you have understood the content of this document, please sign your name in the appropriate place below to signify that you are refusing dilation of your pupil.

\_\_\_\_\_The risks and benefits of pupillary dilation have been adequately explained to me and I understand them, but I do not wish to undergo the procedure of pupillary dilation.

\_\_\_\_\_  
date

\_\_\_\_\_  
signature of patient

\_\_\_\_\_  
attending doctor